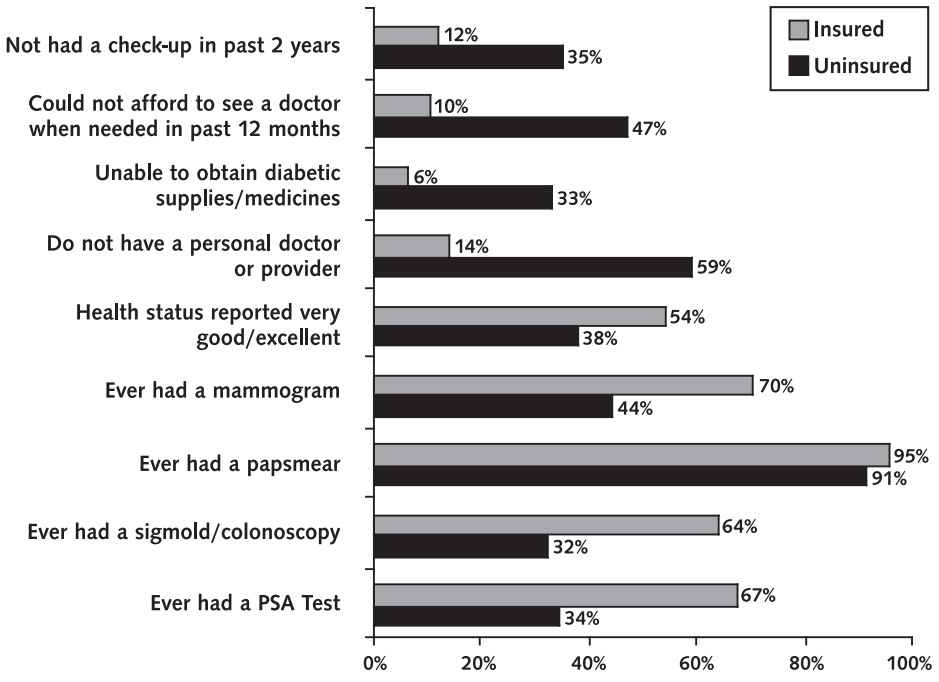
More than 17% of North Carolinians reported that they could not see a physician when they needed because of cost at some time in 2007.[1] Further, 22% of North Carolinians reported that they did not have a regular source of medical care and 15% reported that they had not received a routine check-up within the past two years.[1] People without health insurance coverage are far more likely to report these access barriers than are people with coverage. (See Figure 2.1.) Uninsured North Carolinians are four times more likely than people with insurance coverage to report that they did not seek necessary medical care because of costs (47% vs. 10% respectively) or that they had no usual source of care (59% vs. 14%). The uninsured are nearly three times more likely than people with insurance coverage to have not had a check-up in the last two years (35% v. 12%).[1] In addition, the uninsured are less likely to have had a mammogram, pap smear, sigmoidoscopy, colonoscopy, or a prostate-specific antigen (PSA) test to screen for cancer.[2]

Uninsured North Carolinians are four times more likely than people with insurance coverage to report that they did not seek necessary medical care because of costs (47% vs. 10% respectively) or that they had no usual source of care (59% vs. 14%).

Figure 2.1
The Uninsured are Less Likely to Get Health Services, North Carolina (2006, 2007)*



Source: North Carolina State Center for Health Statistics, North Carolina Department of Health and Human Services. Behavioral Risk Factor Surveillance System, 2006 and 2007. http://www.schs.state.nc.us/SCHS/data/brfss.cfm. Access December 12, 2008.

*2007 data were used for check-up, affordability to see a doctor, personal provider, and health status. 2006 data were used for information not collected on the 2007 survey, including mammogram, pap smear, sigmoidoscopy, colonoscopy, PSA, and diabetic supplies.

Lack of insurance is not the only cause of access barriers. Some people experience barriers because they live in communities that lack sufficient numbers or types of health care practitioners. Others experience access barriers because they have limited health literacy or have language or cultural differences that make it difficult for them to communicate their health concerns with their health care practitioners.[3] However, lack of health insurance is the predominant reason that people experience access barriers.[4] Further, the lack of health insurance negatively impacts on health status. The uninsured are more likely to delay or forego care and are less likely to get preventive screenings or ongoing care for chronic conditions. As a result, they are more likely to be diagnosed with severe health conditions, such as late-stage cancer, and to die prematurely.[5]

Between 1999-2000 and 2006-2007, North Carolina experienced double the increase in the percent uninsured compared to the nation (29% vs. 12% respectively).

The number and percent of people without health insurance has increased both within North Carolina and across the nation more broadly. However, the problem is more acute in North Carolina than in most other states. Between 2000 and 2007, the percent of non-elderly North Carolinians who were uninsured increased by 3.8 percentage points (from 14.8% to 18.6%).[a] In contrast, the nation experienced an increase of 1.6 percentage points (from 15.5% to 17.1%) during the same time period.[6] In effect, between 1999-2000, and 2006-2007, North Carolina has experienced double the increase in the percent uninsured compared to the nation (29% vs. 12% respectively).[b]

While there are many different reasons people lack health insurance, the major factor affecting coverage is cost.[7] Over the last ten years (1999-2008), health insurance premiums increased by 119%. In contrast, wages only increased by 34% and overall prices ("inflation") increased by 29%. (See Figure 2.2.) With the rising costs of health insurance premiums, many employers have shifted more of the costs to employees through increased deductibles, copayments, and coinsurance.[8] Some businesses—particularly small employers—have responded by dropping coverage.

With the rising cost of premiums and cost-sharing and the subsequent drop in employer-sponsored coverage, health insurance is simply too expensive for many people to afford. For example, in 2000 a family of four at 200% of the federal poverty guidelines (FPG), paying the average North Carolina employee share of the family premium, spent 5.2% of their income on health insurance premiums; this percentage increased by nearly 40% to 7.2% by 2006. (See Table 2.1.)

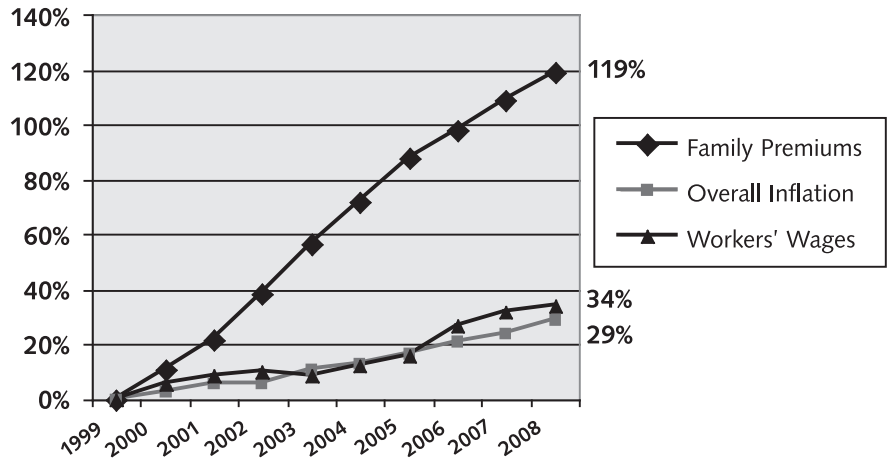
The increase in underlying health care spending contributes to the rising cost of health insurance.[c] Between 1985 and 2006, health care spending in the United

a The approach used to calculate rates yields slightly different estimates than those in other sources due to the particular approach taken here. Please contact the North Carolina Institute of Medicine for information on the approach and methods.

b Unless otherwise noted, all data on the uninsured are based on North Carolina Institute of Medicine analysis of the Current Population Survey's Annual Social and Economic Supplement, published by the US Census Bureau.

c The increase in underlying health care spending drives insurance premiums over time, although there may not be a direct relationship each year as there are other factors, such as the insurance underwriting cycle, which may affect health insurance premiums in the short term. (Ginsburg PB; Robert Wood Johnson Foundation. High and rising health care costs: demystifying US health care spending. http://www.rwjf.org.libproxy.lib.unc.edu/files/research/101508.policysynthesis.costdrivers.brief.pdf.. Accessed January 5, 2009.)

Figure 2.2
Cumulative Changes in Health Insurance Premiums Greater than Changes in Inflation and Wages (United States, 1999-2008)



Source: Kaiser Family Foundation and Health Research and Education Trust. Employer health benefits 2008 annual survey. http://ehbs.kff.org/pdf/7790.pdf. Accessed January 14, 2009.

States grew an average of 7.7% per year, faster than the growth in our gross domestic product (5.6%).[9] North Carolina health care costs per capita increased 7.2% annually from 1998-2004, higher than the national average increase of 6.3%.[10]

North Carolina health care costs per capita increased 7.2% annually from 1998-2004, higher than the national average increase of 6.3%.

This chapter describes, in more detail, the characteristics of the uninsured. Identifying the groups of people who are most likely to be uninsured can help target policy strategies. In addition, this chapter provides more information about key reasons for rising health insurance and health care costs. Neither the state nor the federal government may be able to afford expanded coverage if health care costs continue

Table 2.1
Percent of Income Spent on Health Insurance Premiums Increasing (North Carolina, 2000 and 2006)

Year	Income	Average total premium	Average employee (EE) share	Percent total	Percent EE share
Share of income for family at 200% poverty					
2000	$34,100	$6,649	$1,785	19%	5.2%
2006	$40,000	$10,950	$2,871	27%	7.2%
Share of income for family at 300% poverty					
2000	$51,150	$6,649	$1,785	13%	3.5%
2006	$60,000	$10,950	$2,871	18%	4.8%

Source: Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. Medical Expenditures Panel Survey, 2000 and 2006. http://www.meps.ahrq.gov/mepsweb/. Accessed December 21, 2008.

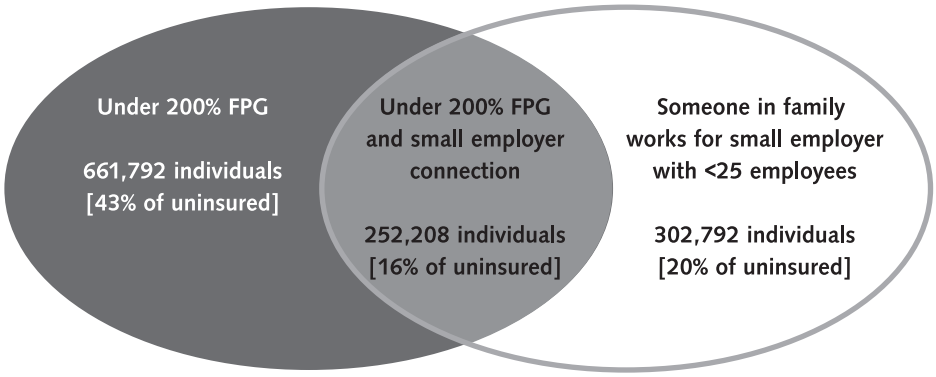
to escalate at the same rate as in the past. Therefore, it is necessary to understand the underlying drivers of health care costs in order to develop future strategies to reduce the rate of growth.

Characteristics of the North Carolina Uninsured[d,e]

There is no single characteristic that describes the uninsured in North Carolina. The uninsured are a diverse group that includes individuals from all income levels, and all racial, ethnic, and age groups. Nonetheless, certain populations are more at risk for being uninsured than others. (See Figure 2.3.) The vast majority, 79%, of the non-eldery uninsured in North Carolina comes from one or more of three groups: children in families with incomes below 200% of the federal poverty guidelines (FPG) (14%), adults with incomes less than 200% FPG (46%), or individuals with

The vast majority, 79%, of the non-elderly uninsured in North Carolina comes from one or more of three groups: children in families with incomes below 200% of the federal poverty guidelines (FPG) (14%), adults with incomes less than 200% FPG (46%), or individuals with a family connection to a small employer with less than 25 employees (36%).

Figure 2.3
Uninsured in North Carolina: Primarily Low-Income or Employee of Small Employer



Other uninsured with incomes >200% FPG and no connection to small employer: 324,611 individuals [21%]

Source: North Carolina Institute of Medicine. Analysis of the US Census Bureau, Current Population Survey's Annual Social and Economic Supplement, 2006-2007.

d Before considering data on the uninsured, it is important to understand the source of these and other data included in the report. Most data are based on surveys conducted by federal agencies such as the US Census Bureau, the Agency for Healthcare Research and Quality, and the Centers for Disease Control and Prevention. These surveys are scientifically rigorous and have been used for years by researchers and policymakers, but are only surveys. Just as political polls and other similar surveys typically yield relatively good estimates, they are still estimates and are subject to many factors, including the particular people interviewed and the timeframe of the interview. Thus, in order to obtain more precise estimates, multiple years are often combined, with weights used to adjust for multiple years of data. Other adjustments were made in specific cases. Details of each estimate developed in this report are available from the North Carolina Institute of Medicine, but since the focus of this report is on policy recommendations, the most important aspects of the data are broad patterns and trends rather than detailed methodology. In other words, the data contained here are useful for assessing general patterns, trends, and relative relationships, but may vary from other sources of similar data due to the nature of surveys.

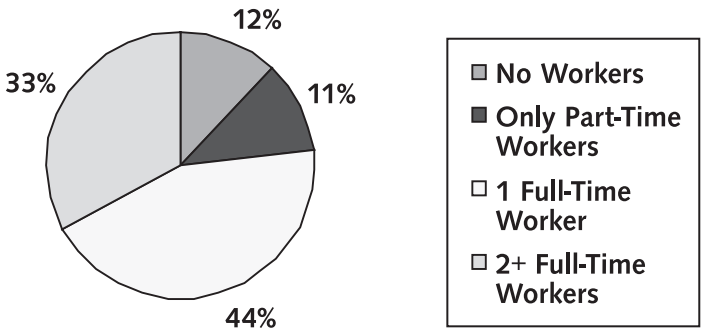
e Data on the North Carolina uninsured are for the non-elderly (<65) population lacking health insurance. Unless otherwise noted, data are for North Carolina's non-elderly uninsured population 2006-2007 and were calculated by the North Carolina Institute of Medicine using the US Census Bureau, Current Population Survey's Annual Social and Economic Supplement.

a family connection to a small employer with less than 25 employees (36%). In addition, individuals of certain racial and ethnic minorities, individuals living in rural areas, and individuals with pre-existing health problems have a greater risk of being uninsured. (See Appendix B for further descriptive data.)

Employment Status

The majority of the uninsured have some family connection to the workforce. Over three-fourths of the uninsured are in a family with at least one full-time worker, with 33% having two or more full-time workers. (See Figure 2.4.) Further, a majority (51.8%) of uninsured adults aged 19-64 are full-time workers themselves, and an additional 14.2% are part-time workers.

Figure 2.4
The Majority of the Uninsured Have a Connection to the Workforce (North Carolina, 2006-2007)



Source: North Carolina Institute of Medicine. Analysis of the US Census Bureau, Current Population Survey's Annual Social and Economic Supplement, 2006-2007.

Employees working in small firms have a much greater risk of being uninsured than do people working in larger firms, with approximately 32% of individuals working for small employers being uninsured compared to 19% or less for people working for larger employers.

Employees working in small firms have a much greater risk of being uninsured than do people working in larger firms, with approximately 32% of individuals working for small employers being uninsured compared to 19% or less for people working for larger employers. Approximately 49% of the uninsured work for an employer with less than 25 employees, compared with 13% employed in mid-size firms (25-99 employees), 12% in large firms (100-999 employees), and 19% in very large firms (more than 1000 employees).

Additionally, individuals working in certain industries have a higher risk of being uninsured. Agriculture, construction, and hospitality carry the highest risk, with 50%, 48%, and 36% of individuals employed in these industries being uninsured, respectively.

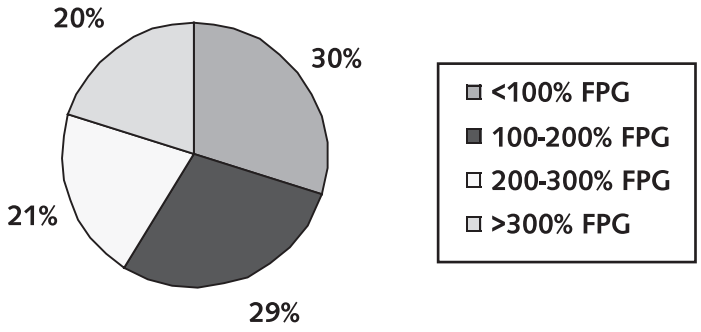
Income Status

Nearly three-fifths of the uninsured in North Carolina have incomes less than 200% FPG. (See Figure 2.5.) Individuals and families with incomes less than 100% FPG ($21,200/year for a family of four in 2008) are the most likely to be uninsured. Approximately 36% of people living in poverty (i.e. <100% FPG) are uninsured, as are 31% of those with incomes between 100%-200% FPG. In contrast, only 7.9% of people with incomes greater than 300% FPG are uninsured.

While the majority of the uninsured in North Carolina are low-income, with incomes less than 200% FPG, approximately 21% have incomes between 200%-300% FPG, and 20% have incomes greater than 300% FPG. There has been a recent increase in the percentage of the uninsured that are near-poor, with incomes between 200%-300% FPG. Since 2001-2002, the percent uninsured who are near-poor has increased by 1.8 percentage points, or 86,000 people.

Nearly three-fifths of the uninsured in North Carolina have incomes less than 200% of the federal poverty guidelines.

Figure 2.5
The Majority of the Uninsured are Low-Income (North Carolina, 2006-2007)



Source: North Carolina Institute of Medicine. Analysis of the US Census Bureau, Current Population Survey's Annual Social and Economic Supplement, 2006-2007.

Race and Ethnicity, Age, and Gender

While almost half (46%) of all the uninsured in North Carolina are white, non-Hispanic, this group has less chance of being uninsured compared to other racial and ethnic groups. Only 13% of white, non-Hispanics are uninsured, compared to 22% of black, non-Hispanic, 34% of people of other races, and 53% of Hispanics. While 53% of Hispanics are uninsured, they are still a relatively small percentage of the total state population. As a result, Hispanics comprise 20% of the uninsured population in the state.

Individuals between the ages of 18 and 34 have the greatest risk of being uninsured compared to other age groups. Approximately 29% of individuals ages 18-34 are uninsured. A smaller percentage (12.5%) of children ages 0-17 are uninsured, as low-income children generally qualify for public coverage. The percentage of people who are uninsured also decreases in older age cohorts, with 20% of adults ages 35-44, 17% of adults ages 45-54, and 14% of adults ages 55-64 being uninsured. Only 1.5% of older adults, age 65 or older, are uninsured, as most older adults qualify for Medicare.

Men are more likely to be uninsured than women, with approximately 20% of men lacking coverage compared to 17% of women. Since 2001-2002, the percent of men without health insurance has increased by 1.7 percentage points whereas the percent of women lacking coverage declined by 0.6 percentage points.

Geography

Individuals living in rural areas have a greater risk of being uninsured. Approximately 20% of people in rural areas are uninsured compared to 18% of people living in urban areas. However, the majority of the uninsured in North Carolina, approximately 64%, live in urban areas. (See Appendix C for county-level data.)

Drivers of Medical Costs

Between 2000 and 2006, the average total employer-based premium for a working family in North Carolina increased by $4,301, almost 65%. (See Table 2.2.) Of the total increase, the share of the family premium paid by the employee grew by $1,086 (or 66%). People with individual coverage saw an increase of $228 in their share of the premium.[11,12] During the same time period median earnings grew just over 12%, nearly $3,000. In effect, premiums for family coverage have grown more than five times faster than median wage earnings between 2000 and 2006.[13,14]

Between 2000 and 2006, the average total employer-based premium for a working family in North Carolina increased by $4,301, almost 65%.

Table 2.2
Premiums Have Increased for Employer-Based Family Coverage in North Carolina (2000-2006)

	2000	2006	$ Change	% Change
Total Premium (Work + Employer Share)	$6,649	$10,950	$4,301	64.7%
Employer Share	$4,864	$8,079	$3,215	66.1%
Worker Share	$1,785	$2,871	$1,086	60.8%

Source: Agency for Healthcare Research and Quality, US Department of Health and Human Services. Medical Expenditure Panel Survey, 2000 and 2006. http://www.meps.ahrq.gov/mepsweb/data_stats/MEPS_topics.jsp?topicid=7Z2. Accessed January 14, 2009.

This rapid growth in premiums stems from an increase in underlying medical costs. High costs and utilization of medical technology and prescription drugs have fueled the increase in health expenditures.[15-18] Additionally, the growing prevalence of chronic illnesses contributes to escalating premiums.[19] Effectively, the rising numbers of uninsured also impact premiums; providers raise the cost of the care they provide to insured people in order to recoup the cost of uncompensated care provided to the uninsured ("cost-shifting"). In addition, there is some evidence that defensive medicine leads to higher costs, but most research concludes that this is a modest driver of costs.[f,9,20-22]

f Defensive medicine is medical practices designed to avert the future possibility of malpractice suits. In defensive medicine, responses are undertaken primarily to avoid liability rather than to benefit the patient.

Technology

Advances in and diffusion of medical technology have been key drivers in the rise of health care costs, accounting for one-half or more of real spending growth.[23] Now more than ever patients receive high-cost diagnostic and treatment technologies in both inpatient and outpatient settings. Compared to other developed nations, the United States has higher prices, greater availability, and greater per capita use of new technologies. For example, the United States has approximately twice as many magnetic resonance imaging (MRI) scanners per-capita and uses them more frequently than other developed nations.[15] Adding to the cost is that these technologies require more capital to house (e.g. specialized laboratories) and more skilled labor to operate, requiring more extensive, specialized training.[15] In addition, some researchers have found that new innovations do not necessarily reduce the use of older diagnostic and treatment technologies.[16] Instead of replacing one for the other, the technologies are often used in tandem.

Advances in and diffusion of medical technology account for one-half or more of real spending growth in health care.

Prescription Drugs

Prescription drugs are also an important driver of medical costs. Between 1997 and 2007, retail prescription drug prices increased an average of 6.9% a year compared to the average annual inflation rate of 2.6%.[17] Utilization of prescription drugs increased by 72% during the same time period.[17] While prescription drug prices have continued to grow at a higher rate than inflation since 1997, between 1999 and 2006 growth was slower than in previous years as a result of greater use of generics and a decrease in new drugs introduced into the market. In 2006, growth in spending for prescription drugs increased again due to the implementation of Medicare Part D, greater use of specialty drugs, and new indications for drugs already on the market. Spending is predicted to grow slightly between 2008 and 2017, with further increases in drug prices and utilization.[18]

Chronic Illness

In 2005, approximately half of all adults in the United States, more than 130 million people, had at least one chronic illness such as diabetes, heart disease, obesity, asthma, or cancer. With the increasing prevalence of chronic illnesses and greater ability to treat and maintain these conditions, the Centers for Disease Control and Prevention estimates that chronic illness accounts for more than two-thirds of the $2 trillion spent on health care in the United States.[24] National research has found that the increase in prevalence, rather than the cost per treated case, is largely responsible for the increase in health care spending. For example, increases in spending on cancer accounted for 6.4% of the increase in total spending between 1987 and 2002. Sixty-one percent of the increase in cancer spending was due to increased prevalence. Prevalence, rather than cost per case, was responsible for 85% or more of the increased spending for eight of the top 20 conditions with the largest contributions to overall spending increases (mental disorders, high cholesterol, back problems, upper gastrointenstinal, kidney problems, heart disease, bone disorders, and stroke).[19]

Uncompensated Care

Approximately 65% of care received by the uninsured is uncompensated care (i.e. care not paid for by insurance or out-of-pocket by the patient's family).[25] Hospitals and physicians attempt to recoup this loss by seeking reimbursement from government programs and by shifting costs to the commercially insured. Costs are shifted to the commercially insured by charging insured patients more than the actual cost of service. In turn, insurance companies increase premiums. Roughly two-thirds of uncompensated care is eventually paid by the commercially insured through higher premiums.

The cost of providing health care to the uninsured nationally was more than $43 billion in 2005, with almost $28 billion in uncompensated care.[25] In North Carolina, the cost of providing health care to the uninsured was approximately $1.3 billion, with $845 million in uncompensated care. As a result of providing uncompensated care, health insurance premiums for private employer coverage increased by a national average of $922 for family coverage and $341 for individual coverage. In North Carolina, premiums increased by $1,130 for family coverage and $438 for individual coverage.[25]

In North Carolina in 2005, the cost of providing health care to the uninsured was approximately $1.3 billion, with $845 million in uncompensated care.

The Cost of Increasing Insurance Coverage

Although the uninsured receive some health care services, they would receive more services if they had coverage. Thus, expanding health insurance to cover the uninsured has implications for total national health care spending. The Congressional Budget Office estimates that increases in insurance coverage could produce a 10% to 15% growth in long-term health care spending, absent any changes in medical technology.[22] Jack Hadley and John Holahan estimated in 2004 that it would cost approximately $48 billion to cover the previously uninsured who would gain insurance under universal coverage.[26] In addition, the authors found that for uninsured individuals, annual per person spending would increase 39% with full-year coverage.

Because of the short time frame in which the Health Access Study Group had to study all the issues that impact access to affordable health care, the group was unable to examine all the underlying reasons for the increase in health care costs. However, the group recognized the need to further study this issue in order to identify cost containment strategies to slow the rate of growth. Further, the NCIOM contracted with actuaries at Mercer Human Resources Consulting Group to develop cost-estimates for the different proposals included in this report, but these actuarial estimates were not available at the time this report was being written. Thus, the Study Group recommends:

Recommendation 2.1

a) The North Carolina General Assembly should direct the North Carolina Institute of Medicine's Health Access Study Group to continue to meet to consider:

1) Options to reduce escalating health care costs (cost-containment),

2) The costs of the different proposals,

3) **The amount that individuals and families should reasonably be expected to contribute for health insurance premiums and other out-of-pocket costs (affordability),**
4) **Changes in federal laws which may impact on health insurance coverage and financing options to expand coverage to the uninsured,**
5) **Whether other options should be considered for universal coverage (including but not limited to single-payer or multi-payer systems),**
6) **Other ways to make health insurance coverage affordable to small employers, and**
7) **Other options to ensure that there are sufficient numbers of health professionals in the future to meet the state's growing and aging population.**

b) **The Health Access Study Group should report its findings and recommendations no later than the convening of the 2010 Session of the North Carolina General Assembly.**

Ultimately, health care coverage needs to be expanded to all North Carolinians. One way to achieve universal coverage within our current multi-payer health system is to ensure that individuals purchase coverage (i.e. an individual mandate). This is essentially what Massachusetts did in their plan for universal coverage, and what other states have considered.[g,27,28] However, people cannot be required to purchase coverage if it is not affordable. Thus, the Study Group recommended that North Carolina institute an individual mandate after the state institutes programs or policies that ensure that health insurance coverage is affordable.

Recommendation 2.2

a) **The North Carolina General Assembly should require individuals to purchase health insurance coverage, as long as insurance coverage is affordable. In order to effectively mandate health insurance coverage for individual citizens of the state, subsidy programs will need to be in place for lower-income populations. The individual mandate may require a "phasing-in" to allow for a sliding scale subsidy to be put into place for populations up to 300% of the federal poverty guidelines.**

g Chapter 58 of the Acts of 2006, available at http://www.mass.gov/legis/laws/seslaw06/sl060058.htm; 830 CMR 111M.2.1, available at http://www.mass.gov/?pageID=dorterminal&L=6&L0=Home&L1=Businesses&L2=Help+%26+Resources&L3=Legal+Library&L4=Regulations+(CMRs)&L5=111M.00%3a+Individual+Health+Coverage&sid=Ador&b=terminalcontent&f=dor_rul_reg_reg_830_cmr_111m_2_1&csid=Ador

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